



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Ruben et al.

Docket No.: PZ003P4

Application No.: 09/852,659

Group Art Unit: 1636

Filed: May 11, 2001

Examiner: D. Sullivan

For: Secreted Protein HPMBQ91 (As Amended)

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of a claim of the subject application, Attorney for Applicants hereby directs the Examiner's attention to references A-O listed on the attached Form SB/08. A copy of each reference is enclosed.

The listed references are presented so that the Patent and Trademark Office can determine any materiality thereof to the claimed invention. See 37 C.F.R. § 1.104(a) concerning the Examiner's duty to consider and use any such information. Applicants respectfully request that the Examiner make the listed references of record in the file history of the application, and consider the information contained therein during the prosecution of this application.

Identification of the listed references is not to be construed an admission of any individual associated with the filing or prosecution of the subject application that such references are available as "prior art" against the subject application. Furthermore, Applicants do not waive any rights to take appropriate action to establish patentability over any of the listed documents should they be applied as references against the claims of the subject application.

Pursuant to 37 C.F.R. § 1.97(c), because this Information Disclosure Statement is being submitted after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Office Action, or a Notice of Allowance under 37 C.F.R. § 1.311, or an action

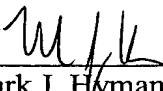
08/06/2003 WARDER1 00000107 083425  
09052659  
180.00 DA  
01 FC:1806

that otherwise closes prosecution, the Patent and Trademark Office will consider this Information Disclosure Statement if it is accompanied by the fee as specified in 37 C.F.R. § 1.17(p).

Accordingly, the Patent & Trademark Office is hereby authorized to charge our Deposit Account No. 08-3425 in the amount of \$180.00 as payment of the required fee, as itemized on the Fee Transmittal Sheet submitted concurrently herewith. The Patent & Trademark Office is also authorized to charge any additional required fee or credit any overpayment in connection with this submission to our Deposit Account No. 08-3425.

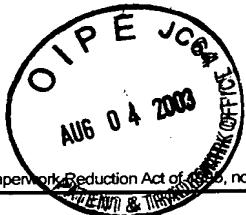
Dated: August 4, 2003

Respectfully submitted,

By   
Mark J. Hyman

Registration No.: 46,789  
HUMAN GENOME SCIENCES, INC.  
9410 Key West Avenue  
Rockville, Maryland 20850  
(240) 314-1224

KKH/JMM/MJH/FR/ba



PTO/SB/08a/b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

|       |   |    |   |                        |         |
|-------|---|----|---|------------------------|---------|
| Sheet | 1 | of | 2 | Attorney Docket Number | PZ003P4 |
|-------|---|----|---|------------------------|---------|

### U.S. PATENT DOCUMENTS

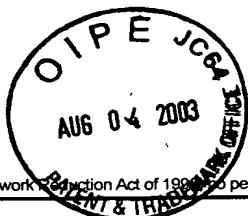
| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
| A                  | US-5,434,158          |  | 07-18-1995                     | Shah, S. K.  |   |

### FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|---|--------------------------------|--|---|----------------|
|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |  |   |                |
| B                  | WO-01/36979-A2        |   | 05-25-2001                     | University of Reading                              |   |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

|                    |                 |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|



PTO/SB/08a/b (05-03)  
Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|                              |   |    |   |                          |                 |
|------------------------------|---|----|---|--------------------------|-----------------|
| Substitute for form 1449/PTO |   |    |   | <b>Complete if Known</b> |                 |
|                              |   |    |   | Application Number       | 09/852,659      |
|                              |   |    |   | Filing Date              | May 11, 2001    |
|                              |   |    |   | First Named Inventor     | Steven M. Ruben |
|                              |   |    |   | Art Unit                 | 1636            |
|                              |   |    |   | Examiner Name            | D. Sullivan     |
| Sheet                        | 2 | of | 2 | Attorney Docket Number   | PZ003P4         |

| <b>NON PATENT LITERATURE DOCUMENTS</b> |                       |   |  |  |  |                |
|--|-----------------------|---|--|--|--|----------------|
| Examiner Initials*                     | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |  |  |  | T <sup>2</sup> |
|  | C                     | KOTANI et al., "Structure and gene organization of bovine neuromedin K precursor," <i>Proc. Nat'l Acad. Sci. USA</i> 83:7074-7078 (1986).   |  |  |  | /              |
|  | D                     | PAGE et al., Excessive placental secretion of neurokinin B during the third trimester causes pre-eclampsia," <i>Nature</i> , 405:797-800 (2000).  |  |  |  | /              |
|  | E                     | KANGAWA et al., "Neuromedin K: a novel mammalian tachykinin identified in porcine spinal cord," <i>Biochem. Biophys. Res. Commun.</i> 114(2):533-540 (1983).  |  |  |  | /              |
|  | F                     | PAGE et al., "A regulatory role for neurokinin B in placental physiology and pre-eclampsia," <i>Regulatory Peptides</i> 98:97-104 (2001).   |  |  |  | /              |
|  | G                     | BAKER et al., "Plasma From Women With Preeclampsia Increases Endothelial Cell Nitric Oxide Production," <i>Hypertension</i> 26(2):244-248 (1995).   |  |  |  | /              |
|  | H                     | KNOCK et al., "Bradykinin-mediated relaxation of isolated maternal resistance arteries in normal pregnancy and preeclampsia," <i>Am. J. Obstet. Gynecol.</i> 175(6):1668-1674 (1996).   |  |  |  | /              |
|  | I                     | PAGE, N. and Lowry, P., "Is 'pre-eclampsia' simply a response to the side effect of a placental tachykinin?" <i>J. Endocrinol.</i> 167:355-361 (2000).  |  |  |  | /              |
|  | J                     | HANSEN et al., "Effect of Vasoactive Intestinal Polypeptide and Substance P on Human Intramyometrial Arteries and Stem Villous Arteries in Term Pregnancy," <i>Placenta</i> 9:501-506 (1988).   |  |  |  | /              |
|  | K                     | BROWNBILL et al., "Neurokinin B is a Paracrine Vasodilator in the Human Fetal Placental Circulation," <i>J. Clin. Endocrinol. &amp; Metabol.</i> 88(5):2164-2170 (2003).  |  |  |  | /              |
|  | L                     | Swiss-Prot Accession No. Q9UHF0, SHEPPARD et al. "Neurokinin B [Precursor]" (September 1999).   |  |  |  | /              |
|  | M                     | Genbank Accession No. NM_019162, BONNER et al. "Rattus Norvegicus tachykinin 2 (Tac2), mRNA" (April 2003).  |  |  |  | /              |
|  | N                     | Genbank Accession No. NM_009312, KAKO et al. "Mus musculus tachykinin 2 (Tac2), mRNA" (April 2003).   |  |  |  | /              |
|  | O                     | Genbank Accession No. AH001152, KOTANI et al. "Bovine preprotachykinin B gene, exon 1"" (April 1993).   |  |  |  | /              |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

|                    |                 |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|